

Patent claims

5 1. A method for optimizing an amplitude-modulated optical signal (OSM), which is generated in a modulator (2) by modulating an optical signal (OS) with the aid of a digital signal (DS),

characterized

10 in that the amplitude-modulated optical signal (OSM) is fed to a frequency discriminator (5) which outputs a spectral distribution signal (SV),

in that the spectral distribution signal (SV) is fed to a control device (6) which is also fed a

15 adjustable reference signal (RS), and

in that the control signal (SR) which sets the operating point of the modulator (2) is generated by comparing the two signals.

20 2. The method as claimed in claim 1, characterized

in that a measuring signal (OMT) which is fed to the frequency discriminator (5) is separated from the amplitude-modulated optical signal (OSM).

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3. The method as claimed in claim 1 or 2, characterized

in that the spectral distribution signal (SV) is determined at the start of a transmission path, and in
30 that the reference signal (RS) is set taking account of the properties of the transmission path (3).

4. The method as claimed in claim 1 or 2, characterized

35 in that the spectral distribution signal (SV) is determined at the receiving end, and

in that the spectral distribution signal (SV) or a control signal (SR) generated therefrom is transmitted to the modulator (2) provided at the transmitting end.

5. The method as claimed in one of the preceding claims,

characterized

in that the control signal (SR) is obtained during periodically occurring time windows (ZF).

6. An arrangement for optimizing an amplitude-modulated optical signal (OSM), having a light source (1) and a modulator (2) to which there are fed an optical signal (OS) from the light source (1) and a digital signal (DS) for amplitude modulation,

characterized

in that the frequency discriminator (5) which outputs a spectral distribution signal (SV) is corrected to the output of the modulator (2) via a splitter (4),

and in that a control device (6) is provided with a reference signal setting device (7) which is fed the spectral distribution signal (SV) and which generates a control signal (SR) which controls the operating point of the modulator (2).

7. The arrangement as claimed in claim 6, characterized

in that an adder is provided which is fed the control signal (SR) and the digital signal (DS), and

in that the adder output is fed to a modulation input of the modulator (2).